## ABSTRACT OF THE DISCLOSURE

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There is provided an inspection apparatus using nuclear magnetic resonance which can execute multislice and multi-frame cardiac imaging of a heart without giving any load on a subject. An inspection apparatus using nuclear magnetic resonance has static magnetic field generation means generating a static magnetic field; magnetic field gradient generation means generating a magnetic field gradient in a first, a second and a third directions orthogonal to each other; radiofrequency magnetic field generation means generating a radiofrequency magnetic field; signal detection means detecting a nuclear magnetic resonance signal (echo) produced from a subject; arithmetic processing means performing arithmetic processing of the detected nuclear magnetic resonance signal; and control means controlling the magnetic field gradient generation means and the radiofrequency magnetic field generation means, wherein the control means executes a pulse sequence acquiring a projection to determine a similarity coefficient between the projection and a reference projection, thereby detecting respiratory motion of the subject.